UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| | APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR ATTORNEY DOCKET N | | CONFIRMATION NO. | |
|----------|--------------------|------------------------------------|--|-------------------|------------------|--|
| _ | 10/606,394 | 06/25/2003 | Frank Westendorf | 7781.0084-00 | 4798 | |
| | | 7590 03/19/200 IENDERSON, FARAE | EXAMINER | | | |
| | LLP | · | , | MITCHELL, JASON D | | |
| | | RK AVENUE, NW N, DC 20001-4413 | | ART UNIT | PAPER NUMBER | |
| | | | | 2193 | | |
| _ | | | · · - | | | |
| L | SHORTENED STATUTOR | Y PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | |
| 3 MONTHS | | NTHS | . 03/19/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | Ap | plication No. | Applicant(s) | | | | | |
|--|--|---|--|--|--------|--|--|--|--|
| Office Action Summary | | | /606,394 | WESTENDORF ET AL. | | | | | |
| | | | aminer | Art Unit | | | | | |
| | | | on Mitchell | 2193 | | | | | |
| Period fo | The MAILING DATE of this commun r Reply | ication appears | on the cover sheet with the c | orrespondence ad | ldress | | | | |
| WHIC - Exter after: - If NO - Failui Any r | DRTENED STATUTORY PERIOD FOR HEVER IS LONGER, FROM THE MISSIONS of time may be available under the provisions SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum state to reply within the set or extended period for reply eply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b). | AILING DATE of 37 CFR 1.136(a). nunication. atutory period will app will, by statute, cause | OF THIS COMMUNICATION In no event, however, may a reply be tim by and will expire SIX (6) MONTHS from the application to become ABANDONE | N. nely filed the mailing date of this of D (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | | | |
| 1) 又 | Responsive to communication(s) filed on 29 <u>December 2006</u> . | | | | | | | | |
| <i>,</i> — | • | 2b)∐ This actio | | | | | | | |
| 3)[| Since this application is in condition | secution as to the | e merits is | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Dispositi | on of Claims | | , | | | | | | |
| 4)⊠ | Claim(s) 1-45 is/are pending in the a | pplication. | | | | | | | |
| , | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | | | | |
| 6)⊠ | 6)⊠ Claim(s) <u>1-45</u> is/are rejected. | | | | | | | | |
| | Claim(s) is/are objected to. | | | | | | | | |
| 8)□ | 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | | |
| Applicati | on Papers | | | | | | | | |
| 9)🛛 | The specification is objected to by the | e Examiner. | | | | | | | |
| 10)🛛 | 10)⊠ The drawing(s) filed on <u>29 December 2006</u> is/are: a) accepted or b)⊠ objected to by the Examiner. | | | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) 🗌 🤄 | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | | | | |
| , — | 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | | | |
| | 1.☐ Certified copies of the priority documents have been received. | | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | | |
| | | | | | | | | | |
| Attachmen | • | | | | | | | | |
| | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (P | TO-948) | 4) Interview Summary Paper No(s)/Mail Da | | | | | | |
| 3) Inform | nation Disclosure Statement(s) (PTO/SB/08) | . 5 5-0) | 5) Notice of Informal P | | | | | | |
| Pape | r No(s)/Mail Date | | 6) | | | | | | |

Application/Control Number: 10/606,394

Art Unit: 2193

DETAILED ACTION

1. Claims 1-45 are pending in this application.

Response to Arguments

2. The Applicant's arguments filed 12/29/06 have been fully considered but they are not persuasive.

The Applicant's statement in the remarks indicating a desire to change the title (see pg. 14, par. 3) is not sufficient to actually cause the suggested amendment. In order to change the title The Applicant should present the change in a separate section in the same way amendments to the claims and replacement drawings were submitted.

The Applicant argues Figures 3-5 are provided to illustrate a computer system that incorporates the Applicant's claimed invention (see the paragraph bridging pp. 14-15).

The Examiner disagrees. First, the drawings are objected to because "only that which is old is illustrated". In other words, The Applicant's claimed method/system/medium is not shown in any of the drawings.

Figure 5 does show a "computer program product (CPP) 100, which may comprise one or more software components and/or data that, when executed by processor 910 perform data processing as described above" (see par. [064]). However,

it is not clear, without more, that the 'data processing' in this citation necessarily references The Applicant's claimed method/system/medium.

The Applicant asserts Lindholm fails to disclose the ability to prevent a second user from modifying a first attribute associated with a first executable solution of the at least one function (see the first paragraph on pg. 16).

The Examiner disagrees. As indicated in the rejection, there is no patentable distinction between the claimed limitation and Lindholm's use of private and public fields (pg. 102, 4.5 Fields "ACC_PUBLIC ... Is public ... ACC_PRIVATE ... is private"). When a field is marked as private a first user (i.e. a call from within the class) can access that field but a second user (i.e. a call from outside the class) cannot.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Methods and Systems for Preventing Unauthorized Modification"

Drawings

4. Figures 3-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-45 are rejected under 35 U.S.C. 102(b) as being anticipated by "The Java Virtual Machine Specification" by Lindholm et al. (Lindholm).

Regarding Claim 1, 16, 31: Lindholm discloses:

defining one or more classes of objects, the classes having one or more methods for performing operations on the objects (pg. 30, 2.13 Interfaces "An interface is a reference type whose members are constants and abstract methods.");

creating one or more objects of the one or more classes, each object having an identifier within its class (pg. 30, 2.13 Interfaces "classes can implement [an interface] by providing implementations for its abstract methods."; pg. 9, 2.4.5 Reference Types, Objects, and Reference Values "There are three kinds of reference types: ... the

Art Unit: 2193

interface types (§2.13) ... An object is a dynamically created class instance ... The reference values ... are pointers to these objects");

creating a tool having at least one function for providing an executable solution to the one or more methods of the one or more classes, whereby the at least one function is assigned to one or more methods of the one or more classes (pg. 30, 2.13 Interfaces "A class may be declared to directly implement one or more interfaces, meaning that any instance of the class implements all the abstract methods specified by that interface."), the tool includes a first attribute associated with a first executable solution of the at least one function and a second attribute associated with a second executable solution of the at least one function (pg. 84, ClassFile "ClassFile { ... field_info fields [fields_count];"; pg. 102, 4.5 Fields "field_info { u2 access_flags ...}"), the fist attribute is modifiable by a first user (pg. 102, 4.5 Fields "ACC_PRIVATE ... is private") and the second attribute is modifiable by a second user (pg. 102, 4.5 Fields "ACC_PUBLIC ... Is public"), and the second user is prevented from modifying the first attribute (pg. 102, 4.5 Fields "Is private; usable only within the defining class"); and

assigning the tool to one of the one or more objects of the one or more classes by using the identifier of the object (pg. 30, 2.13 Interfaces "It is not sufficient that the class happens to implement all the abstract methods of the interface; the class ... must actually be declared to implement the interface, or else the class is not considered to implement the interface."; pg. 258, invokeinterface "Stack ..., objectref, parg1, [arg2 ...]]").

Application/Control Number: 10/606,394

Art Unit: 2193

Regarding Claims 2, 17, and 32: The rejections of claims 1, 16, and 31 are incorporated, respectively; further Lindholm discloses assigning the tool to an object is performed based on a table (pg. 92, 4.4 Constant Pool) wherein the tool is associated with one or more identifiers (pg. 148, 5.3 Interface Method Resolution "A constant pool entry tagged as CONSTANT_InterfaceMethodref (§4.4.2) represents a call to an instance method declared by an interface.").

Regarding Claims 3, 18, and 33: The rejections of claims 1, 16, and 31 are incorporated, respectively; further Lindholm discloses assigning the tool to an object is performed based on a table (pg. 92, 4.4 Constant Pool) wherein the tool is associated with one or more identifiers (g. 148, 5.3 Interface Method Resolution "A constant pool entry tagged as CONSTANT_InterfaceMethodref (§4.4.2) represents a call to an instance method declared by an interface.") and wherein the tool is assigned to objects of only one class (see pg. 30, 2.13 Interfaces "A class may be declared to directly implement one ... interfaces").

Regarding Claims 4, 19, and 34: The rejections of claims 1, 16, and 31 are incorporated, respectively; further Lindholm discloses the identifier is unique within its class (pg. 258, invokeinterface "The method table of the class of the type of objectref is determined."). Note that objectref is a pointer to a memory location (pg. 9, 2.4.5 Reference Types, Objects, and Reference Values "An object is a dynamically created

Art Unit: 2193

class instance ... The reference values ... are pointers to these objects") and thus is unique within the system and inherently anticipates a unique reference within the class.

Regarding Claim 5-8, 20-23, 35-38: The rejections of claim 1-4, 16-19, 31-34 are incorporated, respectively; further Lindholm discloses the at least one function comprises a reference to an executable code (pg. 84, ClassFile "ClassFile { ... method info methods[methods_count];").

Regarding Claims 9-12, 24-27, and 39-42: The rejections of claims 1-4, 16-19, and 31-34 are incorporated, respectively; further Lindholm discloses the at least one function comprises a reference to a first data array that stores information relating to the first attribute for the at least one function and a reference to a second data array that stores information relating to the second attribute for the at least one function (pg. 84, ClassFile "ClassFile { ... field_info fields [fields_count];"; pg. 101, 4.5 Fields "Each field is described by a variable-length field_info structure").

Regarding Claims 13-15, 28-30, and 43-45: The rejections of claims 1-3, 16-18, and 31-33 are incorporated, respectively; further Lindholm discloses the tool comprises a reference to a data array that stores information relating to an attribute for at least two functions of the tool (pg. 84, ClassFile "ClassFile { ... field_info fields [fields_count];"). Note that the 'fields' array is available to all methods of the class and thus anticipates at least two functions (i.e. 'method_count'>=2).

Conclusion

6. **THIS ACTION IS MADE FINAL.** The Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The Examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/606,394

Art Unit: 2193

Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason Mitchell

3/6/07

SUPERVISORY PATENT EXAMINER
SUPERVISORY CENTER 2100